CLAIMS

[1] A semiconductor laser device comprising:

a semiconductor laser element;

a frame having a front face on which the semiconductor laser element is placed; and

a resin molded portion that covers the front and back faces of the frame,

wherein, on a front face side of the frame,

the semiconductor laser element is enclosed with the resin molded portion, and

the resin molded portion has an open front serving as a laser beam emission window, and,

wherein, on a back face side of the frame, there is provided an exposed portion enclosed with the resin molded portion having an open front, the exposed portion where the frame is exposed to an outside.

[2] The semiconductor laser device of claim 1,

wherein the resin molded portion provided on the back face side of the frame has parts thereof along both sides of the exposed portion formed in parallel to an optical axis of the semiconductor laser element.

[3] The semiconductor laser device of claim 2,

wherein the resin molded portion provided on the back face of the frame is formed in a shape of a letter U.

[4] The semiconductor laser device of claim 1,

wherein a front edge of the frame juts from the resin molded portion.

[5] The semiconductor laser device of one of claims 1 to 4,

wherein the frame includes

an element placement portion on which the semiconductor laser element is placed,

a lead portion that is integrally formed with the element placement portion, the lead portion that serves as a current path with a wire connected thereto, and

a tapered portion provided between the element placement portion and the lead portion, the tapered portion whose width is gradually reduced from the element placement portion toward the lead portion.

[6] The semiconductor laser device of claim 5,

wherein the resin molded portion is formed by injecting molding resin from above the tapered portion.

[7] The semiconductor laser device of one of claims 1 to 4,

wherein the frame includes

an element placement portion on which the semiconductor laser element is placed, and

a lead portion that is integrally formed with the element placement portion, the lead portion that serves as a current path with a wire connected thereto, and

wherein the lead portion is made to have a width of 0.4 mm or more.

[8] The semiconductor laser device of claim 7,

wherein the resin molded portion is formed by injecting molding resin from above the lead portion.

[9] The semiconductor laser device of one of claims 1 to 4,

wherein the frame includes

an element placement portion on which the semiconductor laser element is placed,

a lead portion that is formed integrally with the element placement portion, the lead portion that serves as a current path with a wire connected thereto, and

subframes that are arranged in parallel on both sides of the lead portion and are integrated with the lead portion by the resin molded portion, the subframes that serve as current paths with wires connected thereto, and

wherein a width of the lead portion is made greater than a width of each of the subframes.

[10] The semiconductor laser device of claim 9,

wherein the resin molded portion is formed by injecting molding resin from above the lead portion.